ABSTRACT OF THE INVENTION

[0063] Liquid coating compositions and methods for formulating the same are disclosed. The compositions comprise the combination of an epoxy-functional silane, a multipodal silane, and a strong acid dispersed within a solvent. The liquid coating compositions are formulated to be applied to a substrate and thereafter cured. The resultant coating is transparent and abrasion-resistant. The coating may include additional additives or may be specifically formulated to possess specific properties as may be desired for a specific application. Such coating compositions can further be formulated such that the refractive index thereof can be adjusted to correspond to the refractive index of the substrate to which the liquid coating compositions are applied.